Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A method of assessing communication quality in a wireless network comprising a plurality of access points, said method comprising:

receiving as input path loss information indicating path losses between a selected client of said wireless network and said access points;

based on said path loss information, determining a capacity indicator that estimates communication impairment for said client due to contention or collision;

based on said path loss information, determining a data rate indicator that estimates an achievable data rate for communication by said selected client;

determining a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client; and

based on said capacity indicator, said data rate indicator, and said cell loading indicator, determining a client throughput.

Claim 2 (currently amended): ~~The method of claim 1~~ A method of assessing communication quality in a wireless network comprising a plurality of access points, said method comprising:

receiving as input path loss information indicating path losses between a selected client of said wireless network and said access points;

based on said path loss information, determining a capacity indicator that estimates communication impairment for said client due to contention or collision;

based on said path loss information, determining a data rate indicator that estimates an achievable data rate for communication by said selected client;

determining a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client; and

based on said capacity indicator, said data rate indicator, and said cell loading indicator, determining a client throughput;

wherein determining said client throughput comprises multiplying said capacity indicator by said data rate indicator and said cell loading indicator.

Claim 3 (original): The method of claim 1 further comprising:

repeating said receiving, determining a capacity indicator, determining a data rate indicator, and determining a client throughput for a plurality of clients; and

determining a combined quality metric as a reciprocal of an average of reciprocals of client throughputs determined for said plurality of clients.

Claim 4 (original): The method of claim 1 wherein determining a capacity indicator comprises:

determining a downstream capacity indicator for an access point associated with said selected client;

determining an upstream capacity indicator for said selected client; and

calculating said capacity indicator as a weighted sum of said downstream capacity indicator and said upstream capacity indicator.

Claim 5 (original): The method of claim 4 wherein said downstream capacity indicator takes into account contention by said associated access point with other access points, contention by said access point with clients other than said selected client, and collision by said associated access point with other access points.

Claim 6 (original): The method of claim 5 wherein said upstream capacity indicator takes into account contention by said selected client with access points other than said associated access point and collisions by said selected client with access points other than said associated access point.

Claim 7 (original): Apparatus for assessing communication quality in a wireless network comprising a plurality of access points, said apparatus comprising:

means for receiving as input path loss information indicating path losses between a selected client of said wireless network and said access points;

means for, based on said path loss information, determining a capacity indicator that estimates communication impairment for said client due to contention or collision;

means for, based on said path loss information, determining a data rate indicator that estimates an achievable data rate for communication by said selected client;

means for, determining a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client; and

means for, based on said capacity indicator, said data rate indicator, and said cell loading indicator, determining a client throughput.

Claim 8 (currently amended): ~~The apparatus of claim 7~~ Apparatus for assessing communication quality in a wireless network comprising a plurality of access points, said apparatus comprising:

means for receiving as input path loss information indicating path losses between a selected client of said wireless network and said access points;

means for, based on said path loss information, determining a capacity indicator that estimates communication impairment for said client due to contention or collision;

means for, based on said path loss information, determining a data rate indicator that estimates an achievable data rate for communication by said selected client;

means for, determining a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client; and

means for, based on said capacity indicator, said data rate indicator, and said cell loading indicator, determining a client throughput;

wherein said means for determining said client throughput comprises means for multiplying said capacity indicator by said data rate indicator and said cell loading indicator.

Claim 9 (original): The apparatus of claim 7 further comprising:

means for repeating said receiving, determining a capacity indicator, determining a data rate indicator, and determining a client throughput for a plurality of clients; and

means for determining a combined quality metric as a reciprocal of an average of reciprocals of client throughputs determined for said plurality of clients.

Claim 10 (original): The apparatus of claim 7 wherein said means for determining a capacity indicator comprises:

means for determining a downstream capacity indicator for an access point associated with said selected client;

means for determining an upstream capacity indicator for said selected client; and

means for calculating said capacity indicator as a weighted sum of said downstream capacity indicator and said upstream capacity indicator.

Claim 11 (original): The apparatus of claim 10 wherein said downstream capacity indicator takes into account contention by said associated access point with other access points, contention by said access point with clients other than said selected client, and collision by said associated access point with other access points.

Claim 12 (original): The apparatus of claim 11 wherein said upstream capacity indicator takes into account contention by said selected client with access points other than said associated access point and collisions by said selected client with access points other than said associated access point.

Claim 13 (original): A computer program product for assessing communication quality in a wireless network comprising a plurality of access points, said product comprising:

code that causes receipt of path loss information indicating path losses between a selected client of said wireless network and said access points;

code that causes, based on said path loss information, determination of a capacity indicator that estimates communication impairment for said client due to contention or collision;

code that causes, based on said path loss information, determination of a data rate indicator that estimates an achievable data rate for communication by said selected client;

code that causes determination of a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client;

code that causes, based on said capacity indicator, said data rate indicator, and said cell loading indicator, determination of a client throughput; and

a computer-readable storage medium that stores the codes.

Claim 14 (currently amended): ~~The product of claim 13~~ A computer program product for assessing communication quality in a wireless network comprising a plurality of access points, said product comprising:

code that causes receipt of path loss information indicating path losses between a selected client of said wireless network and said access points;

code that causes, based on said path loss information, determination of a capacity indicator that estimates communication impairment for said client due to contention or collision;

code that causes, based on said path loss information, determination of a data rate indicator that estimates an achievable data rate for communication by said selected client;

code that causes determination of a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client;

code that causes, based on said capacity indicator, said data rate indicator, and said cell loading indicator, determination of a client throughput; and

a computer-readable storage medium that stores the codes;

wherein said code that causes determination of said client throughput comprises code that causes multiplication of said capacity indicator by said data rate indicator and said cell loading indicator.

Claim 15 (original): The product of claim 13 further comprising:

code that causes repeated application of said code that causes receiving, code that causes determination of a capacity indicator, code that causes determination of a data rate indicator, and code that causes determination of a client throughput for a plurality of clients; and

code that causes determination of a combined quality metric as a reciprocal of an average of reciprocals of client throughputs determined for said plurality of clients.

Claim 16 (original): The product of claim 13 wherein said code that causes determination of a capacity indicator comprises:

code that causes determination of a downstream capacity indicator for an access point associated with said selected client;

code that causes determination of an upstream capacity indicator for said selected client; and

code that causes calculation of said capacity indicator as a weighted sum of said downstream capacity indicator and said upstream capacity indicator.

Claim 17 (original): The product of claim 16 wherein said downstream capacity indicator takes into account contention by said associated access point with other access points, contention by said access point with clients other than said selected client, and collision by said associated access point with other access points.

Claim 18 (original): The product of claim 17 wherein said upstream capacity indicator takes into account contention by said selected client with access points other than said associated access point and collisions by said selected client with access points other than said associated access point.

Claim 19 (original): Apparatus for assessing communication quality in a wireless network comprising a plurality of access points, said apparatus comprising:

a processor; and

a memory device storing instructions for execution by said processor, said instructions comprising:

code that causes receipt of path loss information indicating path losses between a selected client of said wireless network and said access points;

code that causes, based on said path loss information, determination of a capacity indicator that estimates communication impairment for said client due to contention or collision;

code that causes, based on said path loss information, determination of a data rate indicator that estimates an achievable data rate for communication by said selected client;

code that causes determination of a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client; and

code that causes, based on said capacity indicator, said data rate indicator, and said cell loading indicator, determination of a client throughput.

Claim 20 (currently amended): ~~The apparatus of claim 19~~ Apparatus for assessing communication quality in a wireless network comprising a plurality of access points, said apparatus comprising:

a processor; and

a memory device storing instructions for execution by said processor, said instructions comprising:

code that causes receipt of path loss information indicating path losses between a selected client of said wireless network and said access points;

code that causes, based on said path loss information, determination of a capacity indicator that estimates communication impairment for said client due to contention or collision;

code that causes, based on said path loss information, determination of a data rate indicator that estimates an achievable data rate for communication by said selected client;

code that causes determination of a cell loading indicator that estimates communication impairment due to overloading of a cell occupied by said selected client; and

code that causes, based on said capacity indicator, said data rate indicator, and said cell loading indicator, determination of a client throughput;

wherein said code that causes determination of said client throughput comprises code that causes multiplication of said capacity indicator by said data rate indicator and said cell loading indicator.

Claim 21 (original): The apparatus of claim 19 wherein said instructions further comprise:

code that causes repeated application of said code that causes receiving, code that causes determination of a capacity indicator, code that causes determination of a data rate indicator, and code that causes determination of a client throughput for a plurality of clients; and

code that causes determination of a combined quality metric as a reciprocal of an average of reciprocals of client throughputs determined for said plurality of clients.

Claim 22 (original): The apparatus of claim 19 wherein said code that causes determination of a capacity indicator comprises:

code that causes determination of a downstream capacity indicator for an access point associated with said selected client;

code that causes determination of an upstream capacity indicator for said selected client; and

code that causes calculation of said capacity indicator as a weighted sum of said downstream capacity indicator and said upstream capacity indicator.

Claim 23 (original): The apparatus of claim 22 wherein said downstream capacity indicator takes into account contention by said associated access point with other access points, contention by said access point with clients other than said selected client, and collision by said associated access point with other access points.

Claim 24 (original): The apparatus of claim 23 wherein said upstream capacity indicator takes into account contention by said selected client with access points other than said associated access point and collisions by said selected client with access points other than said associated access point.